

The State of New Hampshire

Department of Environmental Services



Michael P. Nolin Commissioner

March 10, 2004 **Letter of Deficiency** DSP#04-016

Mr. Rick Carrier, Administrator Town of Chesterfield P.O. Box 175, Town Offices Chesterfield, NH 03443

RE: Spofford Lake Dam #045.08, Chesterfield

Dear Mr. Carrier:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on October 31, 2003. During this visual inspection and/or file review, the following deficiencies were observed:

- 1. The Emergency Action Plan (EAP) has not been updated or tested since February 2001;
- 2. There was a 1-foot diameter, 6-inch deep settlement/erosion hole just above the left downstream stone headwall 10-feet from the outlet culvert on the downstream embankment. There does not appear to be a filter fabric separating the stone headwall from the backfill of the downstream embankment. The settlement appears to be from runoff exiting through the stone headwall face;
- 3. There was brush within 10 feet of the right downstream groin;
- 4. Debris removed from the stoplog log bay was stockpiled on both the left and right side of the horizontal overflow spillway; and
- 5. The stoplog lock box was placed on top of the horizontal overflow spillway.

DES believes that the above deficiencies can be corrected by performing the following items by the following schedule:

June 1, 2004:

1. Update and test the EAP and submit your results to Bethann McCarthy, P.E., EAP Coordinator at 271-3406;

By the next schedule inspection in 2007:

2. Repair the 1-foot diameter, 6-inch deep settlement/erosion hole just above the left downstream stone headwall 10-feet from the outlet culvert on the downstream embankment. Additionally, monitor this area for further settlement/erosion and if further holes appear it may be necessary to

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form an overall plan for repair of the stone headwall. Contact our office if further erosion holes develop;

- 3. Remove the brush within 10 feet of the right downstream groin;
- 4. Remove the debris stockpiled on both the left and right side of the horizontal overflow spillway and eliminate further placement of stoplog debris from this area; and
- 5. Either move the stoplog box from its current location or raise the box so the top of the box is at the top of the concrete cutoff wall to allow flow under the box during high flow conditions.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. Please call or write to our office if the repairs are completed ahead of the aforementioned schedule so that DES may schedule a follow-up inspection. Unless notified otherwise, DES will conduct the follow-up inspection on or after the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the bottom of the previous page.

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Dam Safety Engineer

Attachments Fact Sheet DB8, DB13 cc: Gretchen Rule

Bethann McCarthy, P.E., EAP Coordinator

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